

THE UNITED SHATES OF AMERICA

TO ALL TO WHOM THESE: PRESENTS: SHAM, COME: South Ankota Agricultural Experiment Station

MICCORS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE REPOSITION OF SALE, OR REPRODUCING IT, OR CHARTON SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR THE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT SEED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321

OAT

'Stallion'

In Jestimonn Mucrest, I have hereunto set my hand and caused the seal of the Hunt Unriety Frotestion Office to be affixed at the City of Washington, D.C. this seventh day of September, in the year two thousand and seven.

Allost:

Commissioner

Commissioner Flant Variety Protection Office Agricultural Marketing Service Agriculturo

CAPACITY OR TITLE

(See reverse for instructions and information collection burden state

DATE

SEED REGULATORY

AND TESTING BRANCH

DATE

1 / Way 16

Director, SDAES

CAPACITY OR TITLE

GENERAL INSTRUCTIONS: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E, F; (3) for a tuber reproduced variety, verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; and (4) payment by credit card or check drawn on a U.S. bank for \$4,382 (\$518 filing fee and \$3,864 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice). NEW: With the application for a seed reproduced variety or by direct deposit soon after filing, the applicant must provide at least 3,000 viable untreated seeds of the variety per se, and for a hybrid variety at least 3,000 untreated seeds of each line necessary to reproduce the variety. Partial applications will be held in the PVPO for not more than 90 days; then returned to the applicant as un-filed. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a payment by credit card or check payable to "Treasurer of the United States" in the amount of \$768 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291 General E-mail: PVPOmail@usda.gov

Homepage: http://www.ams.usda.gov/science/pvpo/PVPindex.htm

#200700045

SPECIFIC INSTRUCTIONS:

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that the permanent name of the application variety (even if it is a parental, inbred line) has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: U.S. Department of Agriculture, Agricultural Marketing Service, Livestock and Seed Programs, Seed Regulatory and Testing Branch, 801 Summit Crossing Place, Suite C, Gastonia, North Carolina 28054-2193 Telephone: (704) 810-8870. http://www.ams.usda.gov/lsg/seed.htm.

ITEM

19a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach replicated statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 20. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103),
- 23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- 24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

According to the Paperwork Reduction Act of 1995, an egency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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EXHIBIT A STALLION (SD000366-36) Origin and Breeding History of the Variety

'Stallion', a white-hulled spring oat, was developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2006. Stallion was tested as experimental line SD000366-36. SD000366-36 was an F₉ derived line developed from a three-way cross. In 1996, the line SD89507 was crossed with an F₁ having SETTLER/SD93068 parentage. The complete pedigree is Settler/4/Nodaway70 /Dal//MN73231/3/Dumont/5/Settler/6/ND750432/Moore//II75-3402/4/MN72-3/72-29//Dal/Nodaway70/3/Spear/Kelsey//Nodaway70/MN72-3.

Stallion was developed by means of the bulk breeding method. The cross coded X10142 was advanced to the F₃ generation as a bulk population. In 1999, seed from an F₃ panicle was planted as a F_{3:4} derived line as a head row in the crown rust screening nursery. Selection criteria included plant phenotype, crown rust resistance, seed color, and seed quality. In 2000, the line coded SD000366 was grown in the unreplicated Preliminary Yield Trial. Additional selection criteria included yield, test weight, lodging resistance, and if present field disease ratings (crown rust, stem rust, and Barley Yellow Dwarf). SD000366 was advanced to the to the Advanced Yield Trials in 2001 where protein and oil content were added to the selection criteria. Due to superior performance in the 2002 Tristate Regional Yield Trial Nursery it was selected for purification. Five hundred plants derived from SD000366 were screened for crown rust resistance, seed color, and quality in the 2002 fall greenhouse cycle. One hundred and ninety two F₉ seeds, selected from individual plants, were grown in 2003 spring greenhouse cycle for a single plant increase. Breeder seed originated from a F_{9:10} derived line coded SD000366-36, which was selected from the SD000366 Purification Nursery, in 2003. It was selected for a winter preliminary increase in New Zealand. SD000366-36 underwent a minor increase in 2004 and a major increase by Foundation Seed Stocks in 2005. SD000366-36 was evaluated in the 2004-2005 South Dakota Standard Variety Oat Yield Trials (SVO) and the 2005 regional Uniform Midseason Oat Performance Nursery (UMO). It was approved for release as a variety and sold as Foundation Seed for the 2006 growing season.

Stallion has been observed to have up to 10 inch taller variants. These variants were first observed in the New Zealand preliminary increase. They were also observed in the oat projects minor increase, Foundation Seed Stocks major increase, and in production fields. They are more distinguishable in stress environments. The maximum ratio calculated was 1 tall in 200 plants.

Stallion was observed in the 2003 purification nursery, 2004-2006 SVO, 2005 UMO, and the seed increases. Stallion appears to be genetically stable; however, the height and percentage of variants expressed varies with environment. Observations of variants are infrequent in small research plots; however, soil variability in a production fields increases the probability of expression in areas of environmental stress.

EXHIBIT B Stallion (SD000366-36) Statement of Distinction

Stallion is most similar to 'Jerry', but differs in the following characteristics:

- 1) Grain Yield: Stallion's average grain yield was 12 bushels per acre more than Jerry (Table 1.)
- 2) Test Weight: Stallion's average test weight was .9 lbs per bushel more than Jerry (Table 1.)
- 3) Plant Height: Stallion's average plant height was 1.7 inches taller than Jerry (Table 1). Stallion may express up to .5 percent taller variants that will range from 6 to 10 inches taller than the majority of the population.
- 4) Heading Date: Stallion's average heading date was 2.6 days later than Jerry (Table 2).
- 5) Lodging: Stallion lodged 19 percent more than Jerry (Table 2).
- 6) Protein: Stallion's protein content is .6 percent higher than Jerry (Tables 1 and 2).
- 7) Oil: Stallion's oil content is 1.4 percent higher than Jerry (Table 2)
- 8) Crown rust resistance: Stallion is rated moderately resistant to crown rust, including the most recently labeled race CR254. Jerry is rated susceptible to moderately susceptible (Tables 3 and 4).
- 9) Acid Polyacrylamide Gel Electrophoresis: Acid Polyacrylamide Gel Electrophoresis shows the tall plants in Stallion are variants; it also shows Stallion has a distinct seed storage banding pattern compared to Jerry (Figure 1.). The first lane is a bulk sample of Stallion; the second and third lanes are seeds selected from 10 tall panicles and 10 average height panicles respectively. The fourth lane is Jerry.

Table 1. Comparison of mean grain yield, test weight, plant height, and protein content with selected genotypes in the 2003-2005 South Dakota Standard Variety Oat Performance Trials.

Genotype	*%Frequency top yield group	Grain Yield bu/acre	Test weight lbs/bu	Plant height inches	Grain Protein%
HiFi	100	119	35.7	36.0	14.9
Stallion	100	115	37.3	37.0	16.1
Morten	100	113	35.7	37.7	15.5
Loyal	100	109	35.6	36.4	16.0
Jerry	60	103	36.4	35.3	15.7
Don	0	99	36.1	30.6	14.8
Reeves	20	95	36.4	36.0	15.8
Hytest	20	88	38.7	37.2	17.9
Loc. Yrs.	21	21	21	21	21

^{*}top yield group at the .05 LSD level.

Table 2. Comparison of selected genotypes from 35 entries grown in the 2005 regional Uniform Midseason Oat Performance Nursery (UMOPN).

	JULIAN			GROAT	GROAT PROTEIN	<u> </u>	
VARIETY	HEADING	LODGING	GROAT	PROTEIN	YIELD	GROAT	BETA
	DATE	PERCENT	PERCENT	PERCENT	(lbs/A)	OIL%	GLUCAN%
OGLE	166.4	29	70.2	15.7	432	5.3	3.8
STALLION	168.7	52	69.9	17.0	495	6.4	3.9
JERRY	166.1	33	69.6	16.1	423	5.0	4.3
ASSINIBOIA	170.7	34	70.8	15.8	449	5.3	3.7
TEST MEAN	168.4	38	69.1	16.0	446	5.4	3.7
LOCATIONS	14.0	11	11.0	11.0	11. <u>0</u>	11.0	3.0

Table 3. Reaction to crown rust in the 2005 UMOPN

VARIETY	ST.PA	UL, MN ¹	FARGO ²	Brookings1		
	Rep 1	Rep	2 Seedling	IA	crown rust %	
OGLE	40 MS-S	50 MS-S	40 S	3	90	
STALLION	20 R-MS	30 MR-MS	5 MR	0	35	
JERRY	40 MS-S	50 MS-S	60 S	0	97	
ASSINIBOIA	TMS	5 MR-MS	T <u>r S</u>	0	3	

¹ Nursery grown adjacent to buckthorn hedges.

² Inoculated with a rust composite, hill plot

³ 0 = no symptoms to 9 = no seed expected

Table 4. 2005 UMO seedling reaction to crown rust at Winnipeg, Manitoba

VARIETY	CROWN RUST ISOLATES											
	CR225	CR225 CR223 CR13 CR200 CR241 CR249 CR254										
OGLE	4	;1	34	4	4	4	4					
STALLION	0	0	0	0	;	0	;1					
JERRY	;-	0	;- 4sp	34	23	;1-	12					
ASSINIBOIA	<u>;-</u>	0_	0	0 (4)	0	0	4					

^{; =} chlorotic or necrotic spots with no pustule development, 1 = resistant, 2 = moderately resistant,

^{3 =} moderately susceptible, 4 = susceptible

tallion "short"

Jerry

Figure 1.

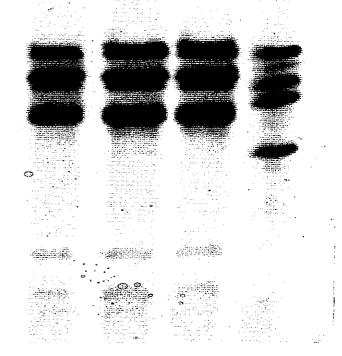
LON HALL - OATS

SDSU Seed Testing Lab PAGE Gel #06-072 10/11/06

All lanes are bulk extractions.

There don't seem to be any differences between Stallion "tall" and Stallion "short".

The variety Jerry doesn't match any of the other lanes.



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U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705 Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY Oat (Avena spp.)

NAME OF APPLICANT (S)	TEMPORARY OR EXPERIMENTAL DESIGNATION	VARIETY NAME			
SOUTH DAKOTA AGRICULTURAL EXPERIMENT STATION	SD000366-36	STALLION	_		
ADDRESS (Street and No. or RD No., City, State, Zip Code, and C	TO SO BEFORE THE PROPERTY OF THE	7			
SOUTH DAKOTA STATE	UNIVERSITY	PVPO NUMBER	-		<u>,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
AG HALL 129		#2() N 7	7 0	0.0
BROOKINGS, SD 570	07	π 2 (JUI		
	etal character of this variety in the boxes below. Place ther 99 or less or 9 or less.	e a zero in the first box	'		
1. SPECIES:					
	= Other (Specify)				
2. GROWTH HABIT:			_		
3 1 = Winter 2 = Semî-Winter	3 = Spring				
3	. •				
Juvenile Growth: 1 = Prostrate	2 = Semi-Prostrate 3 = Erect				
Same as Check 3 No. of Days Later Than 5 Season: 1 = Very Ea	rly (Jaycee) 2 = Early (Nodaway 70) 3 = Mid-Seaso di) 5 = Very Late (Gerry) 6 = Extremely Late (Macki	n (Clintford) inaw)			
4. PLANT HEIGHT: (From Soil Level to Top of Head	1)				
0 9 4 cm Tall	•				
COLOT Cm Tall					
cm Shorter Than *					
Same as Check *					
0 4 cm Taller Than • JERRY	·				

^{*} Relative to a Commercial Variety Grown in the Same Trial

5. STEM:
Diameter: 1 = Fine (Kherson) 2 = Medium (Clintford) 3 = Coarse (Nodaway 70) Hairiness at Upper Culm Nodes: 1 = Hairless 2 = Hairy
Mature Stem Color 1 = Yellow 2 = Reddish
6. LEAF: (Leaf Color: The Royal Horticultural Society's or any recognized color chart should be used to determine the leaf color of the described variety.) 2
7. HEAD:
Panicle Shape: 1 = Equilateral 2 = Intermediate 3 = Side Panicle (Unilateral) Attachment of Lower Whorl of Branches: 1 = First Node 2 = Second Node (False Node) Panicle Size: 1 = Samll (Yancey) 2 = Medium (Walken) 3 = Large (Markton) Panicle Width: 1 = Narrow (Gopher) 2 = Midbroad (Yancy) 3 = Broad (Nodaway 70) The Panicle Length 1
4 = Pectinate (White Tarter) 5 = Confused (Storm King
8. RACHIS: 2
9. SPIKELET: 2 Spikelet Separation by: 1 = Abscission 2 = Semi-Abscission 3 = Fracture 1 Floret Separation by: 1 = Disarticulation 2 = Heterofracture 3 = Basifracture 2 Florets per Spikelet (Mean no.)
10. GLUMES: (Glume Color: The Royal Horticultural Society's or any recognized color chart should be used to determine the leaf color of the
described variety.) 0 7 mm Width 1 8 mm Length 0 9 No. of Veins on Glumes 4 Color: 1 = White 2 = Yellow 3 = Red 4 = Striped
11. LEMMA: (Lemma Color: The Royal Horticultural Society's or any recognized color chart should be used to determine the leaf color of the described variety.)
Color: 1 = White 2 = Yellow 3 = Red 4 = Gray 5 = Black
Hairiness of Dorsal Surface: 1 = Hairless 2 = Hairy
12. AWN: (First Floret)
Occurrence: 1 = Absent (Walken) 2 = Infrequent (Yancey) 3 = Common (Chilocco) 4 = Frequent (Random) Type: 1 = Non-Twisted 2 = Twisted Geniculate 3 = Twisted Geniculate

			<u>#2007004</u>
13. SEED:			" = 0 • • • •
1	Florescence Under Ultravi	olet Light: 1 = Florescent	2 = Non-Florescent
_1		I = Absent (Florida 501) I = Several to Numerous (Floritee)	2 = Absent to Few (Yancey) 3 = Few to Several (Lee) 5 = Numerous (Red Rustproof)
	mm Basal Hair Length		
2 7	gms per 1000 Seeds	[1]9	rng Groat Weight (each)
[1 7	% Groat Protein	6,4	% Groat Oil
0	S: (0 = Not Tested 1 = Susc Cereal Leaf Beetle	0 Bluegrass Billbug 0 Gra	in Bug (C. Sayi) Other (Specify)
0	Helminthosporium 2 Y		Leaf Blotch O Soil-Borne Mosaic Virus Blight Other (Specify)
_	Leaf Blotch		
	Specify Races Tested:	Races Susceptible	Races Resistant
1	Crown Rust	NA29, NA67	CR13, CR200, CR223, CR225
	Stem Rust		CR241, CR249, CR254
	Covered Smut		
0	Loose Smut		

16. INDICATE THE VARIETY YOU BELIEVE MOST CLOSELY TO RESEMBLE THAT SUBMITTED:

CHARACTER	VARIETY	CHARACTER	VARIETY
Plant Tillering	JERRY	Leaf Color	DON
Leaf Size	HYTEST	Leaf Carriage	HYTEST
Seed Color	JERRY	Seed Shape	JERRY

COMMENTS:

Exhibit D Stallion (SD000366-36) Additional Description of the Variety

The following additional descriptive information is presented:

- 1) Table 2. Comparison of selected genotypes from 35 entries grown in the 2005 regional Uniform Midseason Oat Performance Nursery (UMOPN) for groat percent, groat protein yield, and beta-glucan percent.
- 2) Table 5: Yield and test weight comparison of selected genotypes from 35 entries grown in the 2005 UMOPN.
- 3) Table 6: Reaction to stem rust in the 2005 UMOPN.
- 4) Table 7: Reaction to BYDV and Smut in the 2005 UMOPN.
- 5) Release notice of Stallion.

Table 5. Yield and test weight comparison of selected genotypes from 35 entries grown in the 2005 regional Uniform Midseason Oat Performance Nursery (UMOPN).

												_				
VARIETY	TW	YLD	LAC	OTT	AME	URB	W.L.	E.L.	MOR	RSM	FAR	MNT	ITHA	ВK	WAT	MAD
<u> </u>	AVG	AVG	ALB	ONT	ΙA	IL	IN	MI	MN	MN	ND	ND	NY	SD	SD	WI
OGLE	34.6	107	75	119	169	149	152	106	57	42	147	118	76	102	77	115
STALLION	38.1	117	73	106	174	151	185	72	94	74	162	136	101	110	88	112
JERRY	37.6	104	71	105	178	126	153	95	80	45	131	107	93	95	68	104
ASSINIBOIA	36.3	112	80	85	163	94	164	91_	101	65	151	137	98	127	108	106
MEAN	36.9	112	73	105	168	127	164	88	83	56	155	133	91	116	96	111
F Ratio	<u>-</u>		5	4	6			3	3	23	9	6		8	7	1
C.V.			7	14	5	10	6	13	17	13	7	9	15	7	8	17
LSD .05			8	20	17	21	15	19	22	12	17	20	24	16	16	31
Reps			3	3	2	3	4	3	3	3	2	2	3	2	2	3

Table 6. Reaction to stem rust in the 2005 UMOPN

VARIETY	AMES ¹	FARGO ²	WIN (seedling, gr	IN, MAN eenhouse)
<u> </u>	IA	seedli <u>ng</u>	NA29	NA67
OGLE	0	S	34	4
STALLION	0	S	4	34
JERRY	0	S	;1	4
ASSINIBOIA	0	S	12-	_ 4

¹ 0 = no symptoms to 9 = no seed expected

² Inoculated with Na 67, ; = chlorotic or necrotic spots with no pustule development,

^{1 =} resistant, 2 = moderately resistant,

^{3 =} moderately susceptible, 4 = susceptible

Table 7. Reaction to BYDV and Smut in the 2005 UMOPN

		BYD\	/	SMUT
VARIETY	URBAN ¹	AMES ²	W.LAF ³	ST.P⁴
	<u>IL</u>	IA	IN	MN
OGLE	3.5	2	6.8	80
STALLION	5.0	0	4.0	30
JERRY	5.5	2	3.8	70
ASSINIBOIA	3.0	3	5.0	10

¹ 0=none, 9= dead. Inoculated nursery.

Symptoms recorded at 2 weeks after heading

² 0 = no symptoms to 9 = no seed expected. Natural infection.

³ 0=no yellow dwarf symptoms to 9=severe leaf discoloration and plant stunting.

⁴ Percent Infection, artificially inoculated with a composite collection. at 2 to 3 leaf stage with BYDV and CYDV viruliferous *R. padi*.

RE: Release of 'Stallion' oat 2005

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South Dakota Agricultural Experiment Station South Dakota State University Release of 'Stallion' Oat

'Stallion', a white-hulled spring oat, was developed by the South Dakota Agricultural Experiment Station (SDAES) and released in 2005. Stallion was tested as experimental line SD000366-36. SD000366-36 is an F9 derived line developed from a three-parent population SD89507/SETTLER//SD93068. The complete pedigree is Settler/4/Nodaway70/Dal//MN73231/3/Dumont/5/Settler/6/ND750432/Moore//II75-3402/4/MN72-3/72-29//Dal/Nodaway70/3/Spear/Kelsey//Nodaway70/MN72-3.

Stallion, when compared to 'Jerry', has superior grain yield, test weight, groat percentage, and crown rust resistance. Stallion's seedling reaction to crown rust race CR254 is resistant; CR254 is a mutated race that has overcome the Pc68 gene. Stem rust, Barley Yellow Dwarf Virus, and smut resistance are similar to Jerry's and on average Stallion is 1.4 inches taller and heads 3.4 days later.

The following ratings are derived from an eleven locations summary of the 2005 Uniform Midseason Oat Performance Regional Nursery. Trait quality ratings ranged from high to low Disease ratings ranged from immune to susceptible.

<u>Yield</u>	<u>Test</u>	Maturity	<u>Straw</u>	<u>Height</u>	Groat%	<u>Groat</u>
	Weight		Strength			<u>Yield</u>
Medium-	High	Medium-	Medium-	Medium-	Medium-	High
high		late	low	high	high	
Crown Rust	Stem Rust	<u>Smut</u>	Barley	Protein%	<u>Oil%</u>	Beta-
			Yellow Dwarf			glucan
Resistant	Susceptible	Moderately	Moderately	high	Medium-	Medium-
		Resistant	Resistant		high	high

The following table is a two-year summary of South Dakota Crop Performance data:

Standard Variety Oat Yield Trials 2004-2005

SVO	15loc/yr	15loc/yr	3loc/yr	14loc/yr	8Іос/ут	31ос/ут	9loc/yr
SUMMARY	Yield	Test wt	Head	Height	Ldg	Cr	Protein
2004-2005	bu/a	lb/bu	1-8(1=Don)	inches	1-5(1=best)	%	%
JERRY	106.7	36.1	3.8	36.5	3	70	15.4
SD000366-36	112.4	36.7	5.5	38	4.1	1	15.5

Although Stallion was derived from the F9 generation, under certain environmental conditions, it may exhibit up to .5 per cent variants that are 6 to 10 inches taller than the average population. Also, the frequency of non-florescent seeds may be up to one percent.

Application for Plant Variety Protection is pending.

Foundation seed will be made available to interested growers by contacting Jack Ingemansen manager of SD Foundation Seed Stocks.

Phone: (605)-688-5418

Address: Jack Ingemansen, SD Foundation Seed Stocks, Plant Science Department, SDSU, Brookings, SD

57007

REPRODUCE LOCALLY. Include form number and edition date on all	reproductions. FORM APPROVED - OMB No. 0581-0055					
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).					
1. NAME OF APPLICANT(S) South Dakota Agricultural Experiment Sta	2. TEMPORARY DESIGNATION	3. VARIETY NAME				
-	SD000366-36	Stallion				
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)				
South Dakota State University Ag Hall 129	(605) 688-4149	(605) 688-6065				
Brookings, SD 57007	7. PVPO NUMBER					
		# 9 0 0 7 0 0 0				
8. Does the applicant own all rights to the variety? Mark an "X" in the	e appropriate block. If no, please expl a	n. X YES NO				
9. Is the applicant (Individual or company) a U.S. national or a U.S. b.	ased company? If no, give name of co	ountry. X YES NO				
10. Is the applicant the original owner?	NO If no, please answer one	of the following:				
a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. Nationa NO If no, give name of count					
b. If the original rights to variety were owned by a company(ies),	is (are) the original owner(s) a U.S. bas NO If no, give name of country	• •				
11. Additional explanation on ownership (Trace ownership from origin	nal breeder to current owner. Use the re	verse for extra space if needed):				
PLEASE NOTE:						
Plant variety protection can only be afforded to the owners (not license	ees) who meet the following criteria:					
If the rights to the variety are owned by the original breeder, that penational of a country which affords similar protection to nationals of						
If the rights to the variety are owned by the company which employ nationals of a UPOV member country, or owned by nationals of a c genus and species.						
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.						
The original breeder/owner may be the individual or company who direct for definitions.	ected the final breeding. See Section 4	1(a)(2) of the Plant Variety Protection				

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provide and employer.

Form Approved OMB NO 0581-0055

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> U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY **PLANT VARIETY PROTECTION OFFICE** BELTSVILLE, MD 20705

EXHIBIT F DECLARATION REGARDING DEPOSIT

DECLARATION REGARDING DEPOSIT							
name of owner (s) South Dakota Agricultura	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 1 Experiment Station	TEMPORARY OR EXPERIMENTAL DESIGNATION SD000366-36					
	South Dakota State University Ag Hall 129	variety name Stallion					
NAME OF OWNER REPRESENTATIVE (S)	Brookings, SD 57007 ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	FOR OFFICIAL USE ONLY					
Dr. John Kirby	SD Agricultural Experiment Statior Box 2207 - SDSU Brookings, SD 57007	PVPO##2ERO 0700045					

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

Signature